Using a student loan calculator

Students use a student loan calculator to calculate monthly loan payments and how much they can save on interest by paying a little extra each month.

Learning goals

Big idea

The total amount you'll end up paying for a student loan is determined by a combination of the loan principal, the interest rate, and your monthly payment amount.

Essential questions

- How does a student loan get repaid?
- What can you do to reduce the total amount you have to pay back for a student loan?

Objectives

- Use loan data to calculate the monthly payment, total interest paid, and total amount paid for a student loan
- Understand how paying more than the minimum payments can reduce the total cost of the loan

What students will do

- Use an online calculator to determine how much the monthly payments for federal student loans would be for a recent graduate described in a scenario.

KEY INFORMATION

Building block:

Financial knowledge and decision-making skills

Grade level: High school (9–12)

Age range: 13–19

Topic: Borrow (Getting loans), Spend (Paying for college)

School subject: CTE (Career and technical education), Math

Teaching strategy: Cooperative learning

Bloom's Taxonomy level: Understand, Apply

Activity duration: 45–60 minutes

STANDARDS

Council for Economic Education
Standard IV. Using credit

Jump$tart Coalition
Financial decision-making – Standard 4

- Explore how paying extra on a loan can reduce the loan's total cost.
- Reflect on what they learned about repaying student loans.

Preparing for this activity

- ☐ Print copies of all student materials, or prepare for students to access them electronically.
- ☐ While it's not essential, having students complete activities such as "Reading about federal financial aid" or "Learning how federal financial aid can help you pay for higher education" before this one may make it more meaningful.
- ☐ Become familiar with two student loan calculators by following the directions in the student worksheet before introducing them to students:
  - The U.S. Department of Education Office of Federal Student Aid's Repayment Estimator at https://studentloans.gov/myDirectLoan/repaymentEstimator.action. Note that this calculator focuses on federal student loans.
  - The Finaid.org loan prepayment calculator at www.finaid.org/calculators/prepayment.phtml[1]
- ☐ Secure access to the Internet and computers or tablets so students can access the student loan calculators.

What you'll need

THIS TEACHER GUIDE

- **Using a student loan calculator** (guide)
  cfpb_building_block_activities_using-student-loan-calculator_guide.pdf

STUDENT MATERIALS

- **Using a student loan calculator** (worksheet)
  cfpb_building_block_activities_using-student-loan-calculator_worksheet.pdf
- **Computers or tablets**
- **Student loan calculators at** https://studentloans.gov/myDirectLoan/repaymentEstimator.action **and** www.finaid.org/calculators/prepayment.phtml

1. The Consumer Financial Protection Bureau does not endorse this third party or guarantee the accuracy of this third-party information.

Exploring key financial concepts

Since student loans are usually repaid over many years, it's important to understand how they work. When you take out a loan, you're responsible for paying back the principal plus the interest. The principal is the amount you borrowed. The interest is the fee charged for using someone else's money. Interest is calculated daily, so the quicker you can pay off the loan, the less interest you'll have to pay. Your monthly loan statement will show the monthly payment you're expected to make. But you can always pay more than that. This is called a prepayment. And when you pay more, your principal is reduced faster and you'll end up paying less interest over the life of the loan.

TIP

Because financial aid rules and programs change, students should be encouraged to always look for the most up-to-date information.

Teaching this activity

Whole-class introduction

- Distribute the "Using a student loan calculator" worksheet.
- Be sure students understand key vocabulary:
  - **Federal student loans:** These loans are funded by the federal government and have terms and conditions that are set by law. Federal loans also include benefits that private student loans don't usually offer. These benefits could include lower interest rates, repayment plans based on income, and possible loan forgiveness for people who choose to work for a certain amount of time in government or for certain not-for-profit organizations or teach in a low-income school.
  - **Financial aid:** When money is given in the form of grants, work-study, loans, and scholarships to help pay for post-secondary tuition and fees, as well as related expenses such as room and board, books, supplies, and transportation.
  - **Interest:** A fee charged by a lender, and paid by a borrower, for the use of money.
  - **Interest rate:** A percentage of a sum borrowed that is charged by a lender or merchant for letting you use its money.
  - **Loan:** Money that needs to be repaid by the borrower, generally with interest. (You'll have to pay interest on student loans.)
  - **Prepayment:** Payment of all or part of a debt before it comes due.

TIP

Visit CFPB's financial education glossary at consumerfinance.gov/financial-education-glossary/.

- **Principal:** In the lending context, principal is the amount of money that you originally received from the creditor and agreed to pay back on the loan with interest.
- **Private student loans:** Are from private organizations such as banks and credit unions, which set their own terms and conditions. Private loans are generally more expensive than federal loans.

- Introduce students to the idea that principal, interest rate, and time (length of the loan) affect the total amount they will repay for student loans.
- Explain that they'll explore how paying more than the regular monthly loan payment can reduce the total amount repaid for the loan.

Individual or group work

- Students can work individually, in pairs, or in small groups for this activity.
- Make sure students review the worksheet before beginning and know how to access the two online calculators to determine the loan repayment information.
- Students will determine the average federal loan amount for a four-year public university, as well as the standard interest rate and monthly repayment amount using the Repayment Estimator at https://studentloans.gov/myDirectLoan/repaymentEstimator.action.
  - Students will use the results to answer questions 1 and 2 in the worksheet.
  - Be sure students understand that this calculator focuses on federal student loans.
- Next, students will figure out how paying more than the minimum monthly payment affects the loan's total cost using the calculator at http://www.finaid.org/calculators/prepayment.phtml.
  - Students will use the results to answer questions 3 and 4.
  - Question 4 asks students to create a graph or chart to show how paying extra on the loan by varying amounts affects the total interest and the total loan amount.
- As a final step, for question 5, ask students to give advice to friends who are just beginning to pay off their student loans.

Wrap-up

- When students have finished their worksheets, have them share and discuss their findings.
- Ask for volunteers to share their answers to the "Digging deeper" question.

Suggested next steps

Consider searching for other CFPB activities that address the topics of spending (paying for college) or borrowing (getting loans).

Measuring student learning

Students' answers on the worksheet can give you a sense of their ability to use web tools to identify information and their understanding of the topic. **Keep in mind that students' answers may vary.** The important thing is for students to have reasonable justification for their answers.

You might look for the following:

- Students should notice that increasing the monthly loan payment by as little as $10 will significantly reduce the total amount they have to repay for the loan because the loan is getting paid off sooner.
- Advice may include a mention that it's good practice to pay more than the minimum monthly payment amount when possible once basic emergency savings have been established and other basic needs addressed.